

JOB SPECIFICATION UTILITY ENGINEER

General Purpose

Under direction, design, review, approve, and manage planning, construction, repair and maintenance activities associated with water and wastewater, and supervise professional and technical staff.

Typical Duties:

Review, approve and direct planning, construction, repair and maintenance activities associated with water and wastewater. Involves: Develop and approve engineering water and wastewater design plans, drawings, specifications and studies utilizing computer design software and equipment. Direct and manage construction of water and wastewater facilities. Develop and approve construction schedules, general construction procedures and assure project deadlines are met. Interpret and review designs/plans to identify potential issues, economical feasibility and conformance with Utility development strategy, service capacities and general master planning for future development. Provide technical consultation with contractors and design engineers regarding plans and specifications, and coordinate construction with Utilities, Federal, State, and City. Meet with City officials and interested parties to present water utility issues, rezoning requests, master plan development, site plan review, and city ordinances. Prepare and/or approve agreements related to extension of new water and sanitary sewer mains in new subdivisions. Assure construction materials and installations are in accordance with Utilities specifications. Conduct pre/post construction field inspections and respond to field emergencies. Review and approve plans for street repairs, water, sewer and reclaimed water designs. Resolve hydraulic deficiencies in collection system plan and design. Direct all in-house water main and services installations. Initiate utility installations permit applications with appropriate parties. Monitor the installation and maintenance of field water meters. Oversee and monitor detection of leaks. Review and approve proposed relocation of water and utility lines adjustments to specifications. Oversee the management of the operation and maintenance of sewer lifts station and recommend new or upgrades to lift stations. Oversee the management of the sewage collection system operations. Monitor the preventive maintenance of the City's sewer main. Review and approve the scheduling of the water and sewer mains rehabilitation and/or replacement. Monitor staff for compliance with occupational safety and health working regulations, practices and procedures.

Prepare annual budget cost estimates and recommendations for bid awards. Involves: Conduct research and analysis of construction equipment, materials, time, personnel, construction or renovation needs. Analyze facility shortages, excesses, quality and cost of renovating existing facilities. Review calculations and record histories of cost participation by Utility and developers regarding off-site facilities, main, boundary and oversized lines. Prepare bid requests and recommend bid award in the selection of consultants. Administer design agreements for compliance with scope, budget and contract terms. Review and approve recommendations for final payments for completed projects.

Assist with administrative duties as assigned. Involves: Review analysis of technical data and statistical reports to determine growth patterns and plan for expansion of services. Conduct research studies of current and future water needs and develop long and short range capital improvement plans to meet projected need for improvements. Prepare technical and regulatory reports. Administer Surface Water Rights Program. Maintain records and logs of completed contracts, cost analysis, water sampling results and corrective measures. Investigate customer and city official complaints regarding water pressure, new service applications, charges associated with new service installation or requirements and make/approve adjustments, if appropriate.

Supervise and direct professional staff. Involves: Schedule, assign, instruct, guide and check work. Appraise employee performance. Provide for training and development. Enforce personnel rules and regulations, and work behavior standards. Counsel, motivate and maintain harmony. Interview applicants. Recommend hiring, termination, transfers, discipline, merit pay or other employee status changes.



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Knowledge, Skills, and Abilities

- Application of comprehensive knowledge of civil engineering principles and practices, as they relate to water and wastewater systems, facility design and operation.
- Application of comprehensive knowledge of water and wastewater building construction and construction methods, materials, tools and equipment.
- Application of comprehensive knowledge of occupational safety and health rules, regulations, practices and procedures.
- Application of considerable knowledge of cost analysis techniques.
- Application of considerable knowledge of water and wastewater construction specifications, Building Codes, Accessibility Standards, Municipal Code, other principal documents, requirements and procedures.
- Application of good knowledge of personnel rules and regulations and supervisory practices.
- Application of good knowledge and use of a personal computer, computer-aided drafting (CADD) and other design software and equipment.
- Application of some knowledge of public relations practices.
- Read and interpret construction plans and complex construction documents.
- Maintain files and prepare reports.
- Clear, concise, persuasive oral and written communications.
- Establish and maintain effective working relationships with City officials, customers, consultants, subordinates, coworkers, supervisors, contractors, regulatory agencies and the general public.

Other Job Characteristics

None.

Minimum Qualifications

<u>Education and Experience</u>: Equivalent to a combination of a Bachelor's degree in engineering, and four (4) years engineering experience in a water, wastewater or pretreatment utility operation or program.

<u>Licenses and Certificates</u>: Valid Texas Professional Engineer License, or from any state with whom Texas has a reciprocal arrangement, which must be converted to Texas Registration within one (1) year following appointment.